

## United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

DATE MAILED: 11/22/2004

| APPLICATION NO.                                   | FILING DATE                              | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------------------------------|------------------------------------------|----------------------|---------------------|------------------|
| 10/603,821                                        | 06/26/2003                               | Yukio Taniguchi      | 239499US2           | 4091             |
| 22850                                             | 7590 11/22/2004                          |                      | EXAMINER            |                  |
| OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. |                                          |                      | ISAAC, STANETTA D   |                  |
|                                                   | 1940 DUKE STREET<br>ALEXANDRIA, VA 22314 |                      | ART UNIT            | PAPER NUMBER     |
| 7 IDD/II II ID TO                                 | <b>2.1.</b> , 111 <b>22</b> 511          |                      | 2812                |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Application No.                                                                                                                                                                               | Applicant(s)                                                                             |             |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|-------------|--|--|
| 10/603,821 TANIGUCHI ET A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                               | TANIGUCHI ET AL.                                                                         |             |  |  |
| Office Action Summary                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Examiner                                                                                                                                                                                      | Art Unit                                                                                 |             |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Stanetta D. Isaac                                                                                                                                                                             | 2812                                                                                     |             |  |  |
| The MAILING DATE of this communication app                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | ears on the cover sheet with the c                                                                                                                                                            | orrespondence addi                                                                       | ress        |  |  |
| Period for Reply                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                               | a) == a                                                                                  |             |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | 36(a). In no event, however, may a reply be timed within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE! | ely filed s will be considered timely. the mailing date of this com O (35 U.S.C. § 133). | munication. |  |  |
| Status                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                               |                                                                                          |             |  |  |
| 1) Responsive to communication(s) filed on 26 Ju                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | ıne 2003.                                                                                                                                                                                     |                                                                                          |             |  |  |
| • == •                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | action is non-final.                                                                                                                                                                          |                                                                                          |             |  |  |
| 3) Since this application is in condition for allowar                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | nce except for formal matters, pro                                                                                                                                                            | secution as to the r                                                                     | nerits is   |  |  |
| closed in accordance with the practice under E                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.                                                                                                     |                                                                                          |             |  |  |
| Disposition of Claims                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | •                                                                                                                                                                                             |                                                                                          |             |  |  |
| 4) Claim(s) 1-36 is/are pending in the application.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                               |                                                                                          |             |  |  |
| 4a) Of the above claim(s) is/are withdraw                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                               |                                                                                          |             |  |  |
| 5) Claim(s) is/are allowed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                               |                                                                                          |             |  |  |
| 6) Claim(s) is/are rejected.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                               |                                                                                          | ٠           |  |  |
| 7) Claim(s) is/are objected to.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                               |                                                                                          |             |  |  |
| 8) Claim(s) <u>1-36</u> are subject to restriction and/or 6                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | election requirement.                                                                                                                                                                         |                                                                                          |             |  |  |
| Application Papers                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                               |                                                                                          |             |  |  |
| 9) The specification is objected to by the Examine                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | r.                                                                                                                                                                                            |                                                                                          |             |  |  |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                               |                                                                                          |             |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                                                                                                                                                                                               |                                                                                          |             |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                               |                                                                                          |             |  |  |
| 11)☐ The oath or declaration is objected to by the Ex                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | aminer. Note the attached Office                                                                                                                                                              | Action or form PTC                                                                       | D-152.      |  |  |
| Priority under 35 U.S.C. § 119                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                               |                                                                                          |             |  |  |
| 12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | priority under 35 U.S.C. § 119(a)                                                                                                                                                             | -(d) or (f).                                                                             |             |  |  |
| <ol> <li>Certified copies of the priority documents</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | s have been received.                                                                                                                                                                         |                                                                                          |             |  |  |
| 2. Certified copies of the priority documents                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | s have been received in Applicati                                                                                                                                                             | on No                                                                                    |             |  |  |
| <ol> <li>Copies of the certified copies of the prior application from the International Bureau</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | •                                                                                                                                                                                             | ed in this National S                                                                    | tage        |  |  |
| * See the attached detailed Office action for a list                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                               | d. 1 Hus                                                                                 | les         |  |  |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                               | NNE A. GURLEY                                                                            |             |  |  |
| ,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | PRIMA                                                                                                                                                                                         | RY PATENT EXAM                                                                           | NER         |  |  |
| Attachment(s)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                               | 2800, AU 2812                                                                            |             |  |  |
| 1) Notice of References Cited (PTO-892)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | 4)  Interview Summary<br>Paper No(s)/Mail Da                                                                                                                                                  |                                                                                          |             |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | 5) Notice of Informal P                                                                                                                                                                       | atent Application (PTO-                                                                  | 152)        |  |  |
| Paper No(s)/Mail Date                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 6)                                                                                                                                                                                            |                                                                                          |             |  |  |

Art Unit: 2812

## **DETAILED ACTION**

## Election/Restrictions

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
  - Claims 1-15 and 26-28, drawn to an apparatus, classified in class 250, subclass
     1+.
  - II. Claims 16 and 17, drawn to a device, classified in class 178, subclass 119+.
- III. Claims 18-25 and 29-36, drawn to a method, classified in class 438, subclass 151.

  The inventions are distinct, each from the other because of the following reasons:
- 2. Inventions I and II are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the combination does not require having a homogeneous incident light intensity distribution so as to irradiate a predetermined region only. The subcombination has separate utility such as in other combinations that does not require the use of a phase shift mask.
- 3. Inventions I and II are related as process and apparatus for its practice. The inventions are distinct if it can be shown that either: (1) the process as claimed can be practiced by another materially different apparatus or by hand, or (2) the apparatus as claimed can be used to practice another and materially different process. (MPEP § 806.05(e)). In this case the apparatus as claimed can be used to practice another and materially different process, such as a process that

Application/Control Number: 10/603,821

Art Unit: 2812

does not require irradiating a polycrystalline semiconductor film or an amorphous semiconductor film with the light beam having the light intensity distribution to produce a crystallized semiconductor film.

- 4. Inventions II and III are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because the combination does not require having a homogeneous incident light intensity distribution so as to irradiate a predetermined region only. The subcombination has separate utility such as in other combinations that does not require a phase shift mask.
- 5. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Groups II and III, restriction for examination purposes as indicated is proper.
- 6. A telephone call was made to Marvin J. Spivak on 11/15/04 to request an oral election to the above restriction requirement, but did not result in an election being made.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the

Art Unit: 2812

application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stanetta D. Isaac whose telephone number is 571-272-1671. The examiner can normally be reached on Monday-Friday 9:30am -6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Niebling can be reached on 571-272-1679. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Stanetta Isaac Patent Examiner November 15, 2004

PRIMARY PATENT EXAMINER
TC 2800, AU 2812